

## IEC 61850 Certificate Level A<sup>1</sup>

No. 10030574-OPE/INC 17-1891

#### Issued to:

Schneider Electric - Energy Division Steinheimer Str. 117 D-63500 Seligenstadt Germany

#### For the server product:

Easergy MiCOM P139

Feeder Management and Bay Control Unit Software version: P139 -660 -707 -250 Hardware version: 316 and S/N: 3.632090.1

The server product has not been shown to be non-conforming to:

### IEC 61850 Edition 2 Parts 6, 7-1, 7-2, 7-3, 7-4 and 8-1

Communication networks and systems for power utility automation

The conformance test has been performed according to IEC 61850-10 Edition 2, the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL² 1.2.1 with product's protocol, model and technical issue implementation conformance statements: "MiCOM P139 Feeder Management and Bay Control Unit PICS and MICS, release 12/2016" and "MiCOM PX3X Technical Issues Conformance Statement (TICS) P54x/EN TC/Nd5" and the extra information for testing: "MiCOM Px3x Protocol Implementation eXtra Information for Testing, release 03/12/2015".

The following IEC 61850 conformance blocks have been tested with a positive result (number of relevant and executed test cases / total number of test cases):

1	Basic	Exchange	(20/26)
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- 2 Data Sets (4/7)
- 5 Unbuffered Reporting (19/21)
- 6 Buffered Reporting (28/30)

- 9a GOOSE Publish (10/13)
- 9b GOOSE Subscribe (13/14)
- 12a Direct Control (9/18)
- 12c Enhanced Direct Control (9/20)
- 12d Enhanced SBO Control (17/28)
- 13 Time Synchronization (4/7)
- 14 File Transfer (5/8)

This certificate includes a summary of the test results as carried out at Schneider Electric in Germany with UniCA 61850 Client Simulator 4.29.03 with test suite Ed2 4.32.02 and UniCA 61850 Analyzer 5.31.00. This document has been issued for information purposes only, and the original paper copy of the DNV GL verification report No. 10030574-OPE/INC 17-1890 will prevail.

The test has been carried out on one single specimen of the product as referred above and submitted to DNV GL by Schneider Electric. The manufacturer's production process has not been assessed. This certificate does not imply that DNV GL has approved any product other than the specimen tested.

Arnhem, February 17, 2017

P. Cioci

Global Service Line Leader Operational Excellence of Power Systems Issued by:



R. Schimmel

Verification Manager

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<sup>&</sup>lt;sup>1</sup> Level A - Independent test lab with certified ISO 9001 Quality System

<sup>&</sup>lt;sup>2</sup> TPCL - Test procedures change list

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Applicable Test Procedures from the UCA International Users Group Edition 2 Server Test Procedures version 1.0 with TPCL 1.2.1

Conformance Block		Mandatory	Conditional
1:	Basic Exchange	sAss1, sAss2, sAss3, sAssN2, sAssN3, sAssN4, sAssN5, sSrv1, sSrv2, sSrv3, sSrv4, sSrv5, sSrvN1abcd, sSrvN4	sSrv6, sSrv8, sSrv12, sSrvN1e, sSrvN1f, sSrvN3
2:	Data Sets	sDs1, sDs10a, sDsN1ae	sDs15
5:	Unbuffered Reporting	sRp1, sRp2, sRp3, sRp4, sRp5, sRp9, sRp14, sRp15, sRpN1, sRpN2, sRpN3, sRpN4, sRpN8	sRp8, sRp10, sRp11, sRp12, sRp13, sRpN5
6:	Buffered Reporting	sBr1, sBr2, sBr3, sBr4, sBr5, sBr9, sBr14, sBr15, sBr20, sBr21, sBr22, sBr25, sBr26, sBr27, sBr28, sBrN1, sBrN2, sBrN3, sBrN4, sBrN5, sBrN8	sBr8, sBr10, sBr11, sBr12, sBr13, sBr23, sBr24
9a:	GOOSE publish	sGop2a, sGop3, sGop4, sGop9, sGop10, sGop11	sGop1, sGop5, sGop7, sGopN2
9b:	GOOSE subscribe	sGos1, sGos2, sGos3, sGos5, sGos6a, sGos7, sGosN1, sGosN2, sGosN3, sGosN4, sGosN5, sGosN6	sGos6b
12a:	Direct control	sCtl5, sCtl10, sDOns1, sDOns2	sCtl7, sCtl13, sCtl15, sCtl16, sCtl17
12c:	Enhanced Direct Control	sCtl5, sCtl10, sDOes1, sDOes2	sCtl7, sCtl13, sCtl15, sCtl16, sCtl17
12d:	Enhanced SBO Control	sCtl5, sCtl8, sCtl9, sCtl10, sCtl11, sCtl25, sSBOes1, sSBOes2, sSBOes6, sSBOes8	sCtl4, sCtl6, sCtl7, sCtl15, sCtl16, sCtl17, sCtl26
13:	Time sync	sTm1, sTm2, sTmN1	sTm3
14:	File transfer	sFt1, sFt2ab, sFt4, sFt5, sFtN1ab	